

# EXTRACTION OIL & GAS

Location: COLORADO Slot: SLOT#01 LEONARD 2N (1936'FSL & 494'FWL, SEC.21)  
Field: WELD COUNTY (NAD83/TRUE NORTH) Well: LEONARD 2N  
Facility: SEC.21-T02N-R67W Wellbore: LEONARD 2N PWB

Plot reference wellpath is LEONARD 2N PWP (REV-A.0)

True vertical depths are referenced to CYCLONE 37 (28'KB) (RKB)

Measured depths are referenced to CYCLONE 37 (28'KB) (RKB)

CYCLONE 37 (28'KB) (RKB) to Mean Sea Level: 5029 feet

Mean Sea Level to Mud line (At Slot: SLOT#01 LEONARD 2N (1936'FSL & 494'FWL, SEC.21)): 0 feet

Coordinates are in feet referenced to Slot

Grid System: NAD83 / Lambert Colorado SP, Northern Zone (501), US feet

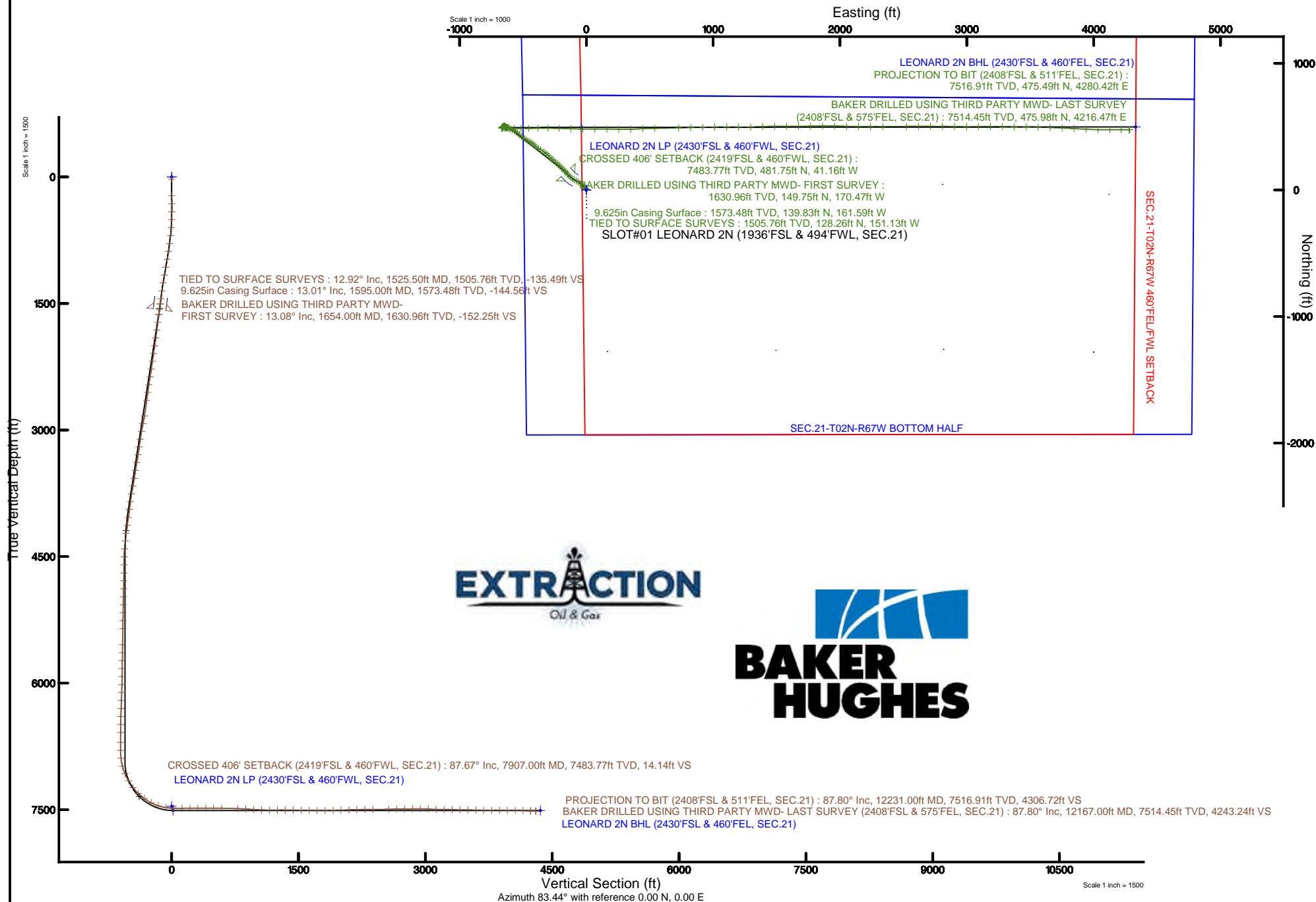
North Reference: True north

Scale: True distance

Depths are in feet

Created by: ingmjarr on 2017-09-14

Database: WA\_DEN\_Denver\_Defn





# Actual Wellpath Report

LEONARD 2N AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#01 LEONARD 2N (1936'FSL & 494'FWL, SEC.21)
Area	COLORADO	Well	LEONARD 2N
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LEONARD 2N AWB
Facility	SEC.21-T02N-R67W		

## REPORT SETUP INFORMATION

Projection System	NAD83 / Lambert Colorado SP, Northern Zone (501), US feet	Software System	WellArchitect® 5.1
North Reference	True	User	Ingmjmr
Scale	0.999959	Report Generated	9/14/2017 at 2:23:45 PM
Convergence at slot	0.39° East	Database/Source file	WA_DEN_Denver_Defn/LEONARD_2N_AWP.xml

## WELLPATH LOCATION

	Local coordinates		Grid coordinates		Geographic coordinates	
	North[ft]	East[ft]	Easting[US ft]	Northing[US ft]	Latitude	Longitude
Slot Location	0.00	0.00	3166872.30	1287776.78	40°07'18.476"N	104°54'11.822"W
Facility Reference Pt			3166872.30	1287776.78	40°07'18.476"N	104°54'11.822"W
Field Reference Pt			3185481.27	1419166.81	40°28'55.560"N	104°49'59.556"W

## WELLPATH DATUM

Calculation method	Minimum curvature	CYCLONE 37 (28'KB) (RKB) to Facility Vertical Datum	5029.00ft
Horizontal Reference Pt	Slot	CYCLONE 37 (28'KB) (RKB) to Mean Sea Level	5029.00ft
Vertical Reference Pt	CYCLONE 37 (28'KB) (RKB)	CYCLONE 37 (28'KB) (RKB) to Mud Line at Slot (SLOT#01 LEONARD 2N (1936'FSL & 494'FWL, SEC.21))	5029.00ft
MD Reference Pt	CYCLONE 37 (28'KB) (RKB)	Section Origin	N 0.00, E 0.00 ft
Field Vertical Reference	Mean Sea Level	Section Azimuth	83.66°



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Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LEONARD 2N AWB
Facility	SEC.21-T02N-R67W		

## WELLPATH DATA (111 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
1525.50	12.920	317.780	1505.76	-136.05	128.26	-151.13	40°07'19.744"N	104°54'13.768"W	1.35	TIED TO SURFACE SURVEYS
1654.00	13.080	318.220	1630.96	-152.90	149.75	-170.47	40°07'19.956"N	104°54'14.017"W	0.15	BAKER DRILLED USING THIRD PARTY MWD- FIRST SURVEY
1748.00	11.890	315.710	1722.74	-165.02	164.61	-184.32	40°07'20.103"N	104°54'14.195"W	1.39	
1843.00	11.180	314.130	1815.82	-176.90	178.03	-197.77	40°07'20.236"N	104°54'14.368"W	0.82	
1937.00	10.780	312.720	1908.10	-188.47	190.34	-210.77	40°07'20.357"N	104°54'14.536"W	0.51	
2032.00	13.520	312.140	2000.96	-201.65	203.82	-225.53	40°07'20.491"N	104°54'14.726"W	2.89	
2126.00	12.900	312.010	2092.47	-215.91	218.21	-241.48	40°07'20.633"N	104°54'14.931"W	0.66	
2221.00	11.800	310.120	2185.27	-229.65	231.57	-256.78	40°07'20.765"N	104°54'15.128"W	1.23	
2315.00	11.000	309.320	2277.42	-242.54	243.45	-271.07	40°07'20.882"N	104°54'15.312"W	0.87	
2410.00	14.010	312.720	2370.16	-256.41	256.99	-286.54	40°07'21.016"N	104°54'15.511"W	3.26	
2504.00	13.080	313.330	2461.54	-270.75	272.01	-302.63	40°07'21.164"N	104°54'15.718"W	1.00	
2599.00	11.890	311.350	2554.29	-284.30	285.86	-317.80	40°07'21.301"N	104°54'15.913"W	1.33	
2694.00	10.120	309.720	2647.54	-296.68	297.66	-331.57	40°07'21.418"N	104°54'16.091"W	1.89	
2883.00	11.710	300.240	2833.13	-323.61	317.93	-360.91	40°07'21.618"N	104°54'16.468"W	1.27	
2977.00	15.200	305.530	2924.54	-340.45	329.90	-379.19	40°07'21.736"N	104°54'16.704"W	3.93	
3072.00	13.920	307.910	3016.49	-357.91	344.16	-398.34	40°07'21.877"N	104°54'16.950"W	1.49	
3166.00	11.890	309.410	3108.11	-372.77	357.25	-414.74	40°07'22.007"N	104°54'17.161"W	2.19	
3261.00	10.610	309.320	3201.28	-385.71	369.01	-429.07	40°07'22.123"N	104°54'17.346"W	1.35	
3356.00	11.000	298.920	3294.61	-399.22	378.93	-443.77	40°07'22.221"N	104°54'17.535"W	2.09	
3450.00	12.420	299.720	3386.65	-414.72	388.28	-460.40	40°07'22.313"N	104°54'17.749"W	1.52	
3545.00	10.780	299.850	3479.71	-430.15	397.77	-476.98	40°07'22.407"N	104°54'17.962"W	1.73	
3640.00	11.890	308.750	3572.86	-444.23	408.32	-492.32	40°07'22.511"N	104°54'18.160"W	2.18	
3734.00	15.200	308.840	3664.23	-459.76	422.11	-509.48	40°07'22.648"N	104°54'18.381"W	3.52	
3829.00	13.300	309.230	3756.30	-476.19	436.84	-527.64	40°07'22.793"N	104°54'18.615"W	2.00	
3923.00	10.780	309.150	3848.23	-489.92	449.23	-542.84	40°07'22.916"N	104°54'18.810"W	2.68	
4018.00	8.790	308.130	3941.84	-501.33	459.32	-555.44	40°07'23.015"N	104°54'18.972"W	2.10	
4113.00	10.380	295.930	4035.52	-513.75	467.54	-568.85	40°07'23.097"N	104°54'19.145"W	2.71	
4207.00	9.810	296.850	4128.07	-527.61	474.86	-583.61	40°07'23.169"N	104°54'19.335"W	0.63	
4302.00	8.480	297.250	4221.86	-540.22	481.73	-597.06	40°07'23.237"N	104°54'19.508"W	1.40	
4396.00	7.200	296.150	4314.98	-550.96	487.50	-608.51	40°07'23.294"N	104°54'19.656"W	1.37	



# Actual Wellpath Report

LEONARD 2N AWP

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## REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#01 LEONARD 2N (1936'FSL & 494'FWL, SEC.21)
Area	COLORADO	Well	LEONARD 2N
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LEONARD 2N AWB
Facility	SEC.21-T02N-R67W		

## WELLPATH DATA (111 stations)

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
4491.00	5.920	299.230	4409.35	-559.97	492.51	-618.13	40°07'23.343"N	104°54'19.779"W	1.40	
4585.00	1.020	279.050	4503.15	-564.72	495.01	-623.19	40°07'23.368"N	104°54'19.845"W	5.29	
4680.00	1.100	197.430	4598.14	-565.91	494.28	-624.29	40°07'23.361"N	104°54'19.859"W	1.46	
4775.00	1.020	239.120	4693.13	-567.04	492.97	-625.29	40°07'23.348"N	104°54'19.872"W	0.80	
4870.00	1.280	256.750	4788.11	-568.87	492.29	-627.05	40°07'23.341"N	104°54'19.894"W	0.46	
4964.00	1.280	274.110	4882.09	-570.94	492.13	-629.12	40°07'23.340"N	104°54'19.921"W	0.41	
5058.00	1.590	288.830	4976.06	-573.15	492.62	-631.40	40°07'23.344"N	104°54'19.950"W	0.51	
5153.00	1.280	301.350	5071.03	-575.19	493.60	-633.56	40°07'23.354"N	104°54'19.978"W	0.46	
5247.00	1.410	307.820	5165.00	-576.85	494.86	-635.37	40°07'23.367"N	104°54'20.001"W	0.21	
5342.00	1.280	309.720	5259.97	-578.42	496.25	-637.11	40°07'23.380"N	104°54'20.024"W	0.14	
5437.00	1.410	315.050	5354.95	-579.89	497.76	-638.75	40°07'23.395"N	104°54'20.045"W	0.19	
5626.00	1.190	300.640	5543.90	-582.91	500.40	-642.08	40°07'23.421"N	104°54'20.088"W	0.21	
5721.00	1.190	312.540	5638.88	-584.34	501.57	-643.65	40°07'23.433"N	104°54'20.108"W	0.26	
5815.00	1.020	290.730	5732.86	-585.73	502.53	-645.16	40°07'23.442"N	104°54'20.127"W	0.48	
5910.00	1.020	289.730	5827.85	-587.24	503.11	-646.74	40°07'23.448"N	104°54'20.148"W	0.02	
6004.00	0.880	266.710	5921.84	-588.71	503.36	-648.25	40°07'23.451"N	104°54'20.167"W	0.43	
6099.00	1.500	244.630	6016.81	-590.62	502.78	-650.10	40°07'23.445"N	104°54'20.191"W	0.80	
6193.00	1.900	241.020	6110.77	-593.22	501.50	-652.58	40°07'23.432"N	104°54'20.223"W	0.44	
6288.00	2.390	238.070	6205.71	-596.46	499.69	-655.64	40°07'23.414"N	104°54'20.262"W	0.53	
6383.00	2.390	246.610	6300.62	-600.14	497.85	-659.14	40°07'23.396"N	104°54'20.307"W	0.37	
6477.00	2.300	254.410	6394.55	-603.88	496.57	-662.75	40°07'23.383"N	104°54'20.354"W	0.35	
6572.00	1.680	167.030	6489.51	-605.60	494.70	-664.28	40°07'23.365"N	104°54'20.373"W	2.93	
6667.00	1.590	180.340	6584.47	-605.59	492.02	-663.97	40°07'23.339"N	104°54'20.370"W	0.41	
6785.00	1.810	204.130	6702.42	-606.72	488.69	-664.74	40°07'23.306"N	104°54'20.379"W	0.62	
6880.00	0.800	100.440	6797.40	-606.85	487.20	-664.70	40°07'23.291"N	104°54'20.379"W	2.26	
6974.00	5.790	91.540	6891.21	-601.52	486.95	-659.31	40°07'23.288"N	104°54'20.310"W	5.32	
7069.00	15.200	92.330	6984.52	-584.42	486.31	-642.04	40°07'23.282"N	104°54'20.087"W	9.91	
7163.00	23.510	90.440	7073.13	-553.57	485.67	-610.93	40°07'23.276"N	104°54'19.687"W	8.86	
7258.00	30.310	89.820	7157.79	-510.87	485.60	-567.96	40°07'23.275"N	104°54'19.134"W	7.16	
7353.00	36.410	89.910	7237.10	-458.96	485.72	-515.74	40°07'23.276"N	104°54'18.461"W	6.42	

### REFERENCE WELLPATH IDENTIFICATION

Operator	EXTRACTION OIL & GAS	Slot	SLOT#01 LEONARD 2N (1936'FSL & 494'FWL, SEC.21)
Area	COLORADO	Well	LEONARD 2N
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LEONARD 2N AWB
Facility	SEC.21-T02N-R67W		

### WELLPATH DATA (111 stations) † = interpolated/extrapolated station

MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
7448.00	45.520	88.720	7308.77	-397.04	486.52	-453.53	40°07'23.284"N	104°54'17.661"W	9.62	
7542.00	54.000	89.910	7369.43	-325.71	487.33	-381.85	40°07'23.292"N	104°54'16.738"W	9.07	
7637.00	62.620	90.130	7419.29	-245.45	487.29	-301.09	40°07'23.292"N	104°54'15.698"W	9.08	
7731.00	72.910	91.320	7454.82	-159.22	486.16	-214.21	40°07'23.281"N	104°54'14.580"W	11.01	
7826.00	81.310	92.030	7475.99	-67.60	483.45	-121.72	40°07'23.254"N	104°54'13.389"W	8.87	
7907.00†	87.669	90.391	7483.77	12.28	481.75	-41.16	40°07'23.237"N	104°54'12.352"W	8.10	CROSSED 406' SETBACK (2419'FSL & 460'FWL, SEC.21)
7920.00	88.690	90.130	7484.18	25.19	481.69	-28.17	40°07'23.237"N	104°54'12.185"W	8.10	
8015.00	90.810	89.910	7484.59	119.60	481.66	66.83	40°07'23.236"N	104°54'10.962"W	2.24	
8110.00	89.880	90.750	7484.02	213.95	481.11	161.82	40°07'23.231"N	104°54'09.739"W	1.32	
8204.00	90.410	91.230	7483.78	307.18	479.49	255.81	40°07'23.215"N	104°54'08.529"W	0.76	
8299.00	89.400	88.240	7483.94	401.64	479.93	350.79	40°07'23.219"N	104°54'07.307"W	3.32	
8393.00	91.120	86.830	7483.51	495.41	483.97	444.70	40°07'23.259"N	104°54'06.098"W	2.37	
8488.00	88.910	89.510	7483.49	590.11	487.00	539.64	40°07'23.289"N	104°54'04.876"W	3.66	
8677.00	88.510	88.240	7487.74	778.27	490.71	728.55	40°07'23.326"N	104°54'02.444"W	0.70	
8772.00	86.390	88.540	7491.97	872.85	493.38	823.41	40°07'23.352"N	104°54'01.223"W	2.25	
8866.00	86.300	89.430	7497.96	966.25	495.04	917.20	40°07'23.368"N	104°54'00.015"W	0.95	
8961.00	87.410	87.930	7503.17	1060.74	497.23	1012.03	40°07'23.390"N	104°53'58.795"W	1.96	
9056.00	89.700	90.620	7505.57	1155.24	498.43	1106.98	40°07'23.402"N	104°53'57.572"W	3.72	
9150.00	91.380	91.140	7504.68	1248.49	496.98	1200.96	40°07'23.387"N	104°53'56.363"W	1.87	
9244.00	89.090	88.240	7504.30	1341.95	497.49	1294.94	40°07'23.392"N	104°53'55.153"W	3.93	
9339.00	88.690	87.750	7506.14	1436.66	500.82	1389.86	40°07'23.425"N	104°53'53.931"W	0.67	
9434.00	90.500	90.040	7506.81	1531.25	502.65	1484.83	40°07'23.443"N	104°53'52.708"W	3.07	
9528.00	88.200	89.820	7507.88	1624.68	502.76	1578.82	40°07'23.444"N	104°53'51.499"W	2.46	
9623.00	88.910	89.910	7510.27	1719.09	502.99	1673.79	40°07'23.446"N	104°53'50.276"W	0.75	
9718.00	90.500	89.030	7510.76	1813.60	503.87	1768.78	40°07'23.455"N	104°53'49.053"W	1.91	
9812.00	92.180	89.030	7508.56	1907.16	505.46	1862.74	40°07'23.471"N	104°53'47.844"W	1.79	
9907.00	91.380	90.920	7505.61	2001.53	505.50	1957.69	40°07'23.471"N	104°53'46.621"W	2.16	
10002.00	92.710	92.250	7502.22	2095.56	502.87	2052.59	40°07'23.445"N	104°53'45.400"W	1.98	
10096.00	90.410	90.440	7499.66	2188.67	500.67	2146.52	40°07'23.423"N	104°53'44.191"W	3.11	
10191.00	91.380	89.910	7498.18	2283.04	500.38	2241.50	40°07'23.420"N	104°53'42.968"W	1.16	



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LEONARD 2N AWP

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WELLPATH DATA (111 stations)										
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Vert Sect [ft]	North [ft]	East [ft]	Latitude	Longitude	DLS [°/100ft]	Comments
10286.00	89.400	89.820	7497.53	2377.48	500.60	2336.50	40°07'23.422"N	104°53'41.745"W	2.09	
10474.00	92.000	89.250	7495.24	2564.46	502.13	2524.46	40°07'23.437"N	104°53'39.326"W	1.42	
10569.00	89.620	90.130	7493.89	2658.92	502.64	2619.44	40°07'23.442"N	104°53'38.103"W	2.67	
10663.00	90.280	90.440	7493.98	2752.29	502.17	2713.44	40°07'23.437"N	104°53'36.893"W	0.78	
10758.00	92.090	89.650	7492.01	2846.68	502.10	2808.41	40°07'23.437"N	104°53'35.670"W	2.08	
10852.00	89.790	91.410	7490.47	2939.98	501.23	2902.39	40°07'23.428"N	104°53'34.461"W	3.08	
10947.00	86.920	89.910	7493.20	3034.22	500.13	2997.33	40°07'23.417"N	104°53'33.238"W	3.41	
11041.00	88.600	89.650	7496.87	3127.61	500.49	3091.25	40°07'23.420"N	104°53'32.029"W	1.81	
11135.00	90.190	88.940	7497.86	3221.15	501.65	3185.24	40°07'23.432"N	104°53'30.820"W	1.85	
11230.00	87.800	92.030	7499.53	3315.44	500.85	3280.20	40°07'23.424"N	104°53'29.597"W	4.11	
11324.00	88.600	90.750	7502.48	3408.54	498.57	3374.12	40°07'23.401"N	104°53'28.388"W	1.61	
11418.00	90.010	90.220	7503.62	3501.87	497.77	3468.11	40°07'23.393"N	104°53'27.178"W	1.60	
11512.00	87.890	91.850	7505.34	3595.06	496.08	3562.07	40°07'23.376"N	104°53'25.969"W	2.84	
11607.00	89.310	91.720	7507.67	3689.08	493.12	3656.99	40°07'23.347"N	104°53'24.747"W	1.50	
11702.00	91.210	92.510	7507.23	3783.04	489.61	3751.92	40°07'23.312"N	104°53'23.525"W	2.17	
11796.00	89.620	93.520	7506.55	3875.79	484.67	3845.79	40°07'23.263"N	104°53'22.316"W	2.00	
11891.00	88.910	92.640	7507.77	3969.50	479.56	3940.64	40°07'23.212"N	104°53'21.095"W	1.19	
11985.00	90.010	90.920	7508.66	4062.54	476.64	4034.58	40°07'23.183"N	104°53'19.886"W	2.17	
12079.00	87.410	89.730	7510.77	4155.88	476.11	4128.55	40°07'23.178"N	104°53'18.676"W	3.04	
12167.00	87.800	90.440	7514.45	4243.25	475.98	4216.47	40°07'23.177"N	104°53'17.545"W	0.92	BAKER DRILLED USING THIRD PARTY MWD- LAST SURVEY (2408'FSL & 575'FEL, SEC.21)
12231.00	87.800	90.440	7516.91	4306.75	475.49	4280.42	40°07'23.172"N	104°53'16.721"W	0.00	PROJECTION TO BIT (2408'FSL & 511'FEL, SEC.21)

HOLE & CASING SECTIONS - Ref Wellbore: LEONARD 2N AWB Ref Wellpath: LEONARD 2N AWP									
String/Diameter	Start MD [ft]	End MD [ft]	Interval [ft]	Start TVD [ft]	End TVD [ft]	Start N/S [ft]	Start E/W [ft]	End N/S [ft]	End E/W [ft]
9.625in Casing Surface	28.00	1595.00	1567.00	28.00	1573.48	0.00	0.00	139.83	-161.59
8.5in Open Hole	1595.00	12231.00	10636.00	1573.48	7516.91	139.83	-161.59	475.49	4280.42

REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#01 LEONARD 2N (1936'FSL & 494'FWL, SEC.21)
Area	COLORADO	Well	LEONARD 2N
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LEONARD 2N AWB
Facility	SEC.21-T02N-R67W		

TARGETS								
Name	TVD [ft]	North [ft]	East [ft]	Grid East [US ft]	Grid North [US ft]	Latitude	Longitude	Shape
SEC.21-T02N-R67W BOTTOM HALF	0.00	0.00	0.00	3166872.30	1287776.78	40°07'18.476"N	104°54'11.822"W	polygon
SEC.21-T02N-R67W TOP HALF	0.00	0.00	0.00	3166872.30	1287776.78	40°07'18.476"N	104°54'11.822"W	polygon
SEC.21-T02N-R67W 460'FEL/FWL SETBACK	7460.00	0.00	0.00	3166872.30	1287776.78	40°07'18.476"N	104°54'11.822"W	polygon
LEONARD 2N BHL (2430'FSL & 460'FEL, SEC.21)	7510.00	498.00	4331.34	3171200.01	1288303.90	40°07'23.394"N	104°53'16.066"W	point
LEONARD 2N LP (2430'FSL & 460'FWL, SEC.21)	7510.00	493.98	-39.43	3166829.55	1288270.47	40°07'23.358"N	104°54'12.330"W	point

WELLPATH COMPOSITION - Ref Wellbore: LEONARD 2N AWB					Ref Wellpath: LEONARD 2N AWP	
Start MD [ft]	End MD [ft]	Positional Uncertainty Model	Log Name/Comment		Wellbore	
28.00	1525.50	ISCWSA MWD, Rev. 4 (Standard)	TOTAL SURVEYS <221.5-1525.50>		LEONARD 2N AWB	
1525.50	12167.00	ISCWSA MWD, Rev. 4 (Standard)	BAKER DRILLED USING THIRD PARTY MWD <1654-12167>		LEONARD 2N AWB	
12167.00	12231.00	Blind Drilling (std)	Projection to bit		LEONARD 2N AWB	



# Actual Wellpath Report

LEONARD 2N AWP

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REFERENCE WELLPATH IDENTIFICATION			
Operator	EXTRACTION OIL & GAS	Slot	SLOT#01 LEONARD 2N (1936'FSL & 494'FWL, SEC.21)
Area	COLORADO	Well	LEONARD 2N
Field	WELD COUNTY (NAD83/TRUE NORTH)	Wellbore	LEONARD 2N AWP
Facility	SEC.21-T02N-R67W		

WELLPATH COMMENTS				
MD [ft]	Inclination [°]	Azimuth [°]	TVD [ft]	Comment
1525.50	12.920	317.780	1505.76	TIED TO SURFACE SURVEYS
1654.00	13.080	318.220	1630.96	BAKER DRILLED USING THIRD PARTY MWD- FIRST SURVEY
7907.00	87.669	90.391	7483.77	CROSSED 406' SETBACK (2419'FSL & 460'FWL, SEC.21)
12167.00	87.800	90.440	7514.45	BAKER DRILLED USING THIRD PARTY MWD- LAST SURVEY (2408'FSL & 575'FEL, SEC.21)
12231.00	87.800	90.440	7516.91	PROJECTION TO BIT (2408'FSL & 511'FEL, SEC.21)